

AD-A041 453

ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/G 4/2  
12815C LANCE MISSILE NUMBER 4043, ROUND NUMBER 294 RSL (18 JANU--ETC(U)  
JAN 77

UNCLASSIFIED

DR-936

NL

| OF |  
AD  
A041453



END  
DATE  
FILMED  
8 - 77

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

DR-936  
January 1977

AD

12  
B.S.

ADA 041453

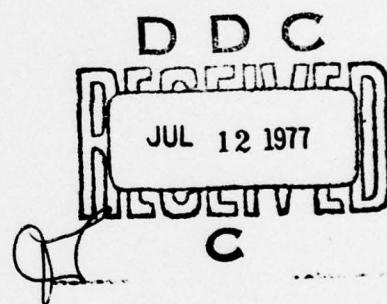
METEOROLOGICAL DATA REPORT

12815C LANCE  
MISSILE NO. 4043, ROUND NO. 294 RSL  
(18 January 1977)

BY

WSMR METEOROLOGICAL TEAM

COPY AVAILABLE TO DDC DOES NOT  
PERMIT FULLY LEGIBLE PROJECTION



ATMOSPHERIC SCIENCES LABORATORY  
WHITE SANDS MISSILE RANGE, NEW MEXICO

AD No. \_\_\_\_\_  
DDC FILE COPY

.....  
**ECOM**  
UNITED STATES ARMY ELECTRONICS COMMAND

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government endorsement or approval of commercial products or services referenced herein.

**UNCLASSIFIED**

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR-936	2. GOVT ACCESSION NO. <i>Number</i>	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12815C LANCE MISSILE NO. 4043, ROUND NO. 294 RSL <i>(18 January 1977)</i>	5. TYPE OF REPORT & PERIOD COVERED	
7. AUTHOR(s) WSMR Meteorological Team data dept.	6. PERFORMING ORG. REPORT NUMBER	
9. PERFORMING ORGANIZATION NAME AND ADDRESS	8. CONTRACT OR GRANT NUMBER(s) DA Task 1T665702D127-02	
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Command Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico	12. REPORT DATE January 1977	
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Command Ft. Monmouth, New Jersey	13. NUMBER OF PAGES 39	
16. DISTRIBUTION STATEMENT (of this Report)	15. SECURITY CLASS. (of this report) UNCLASSIFIED	
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)	15a. DECLASSIFICATION/DOWNGRADING SCHEDULE	
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
1. Ballistics 2. Meteorology 3. Wind		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		
Metorological data gathered for the launching of 12815C Lance, Missile Number 4043, Round Number 294 RSL, are presented in tabular form.		

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

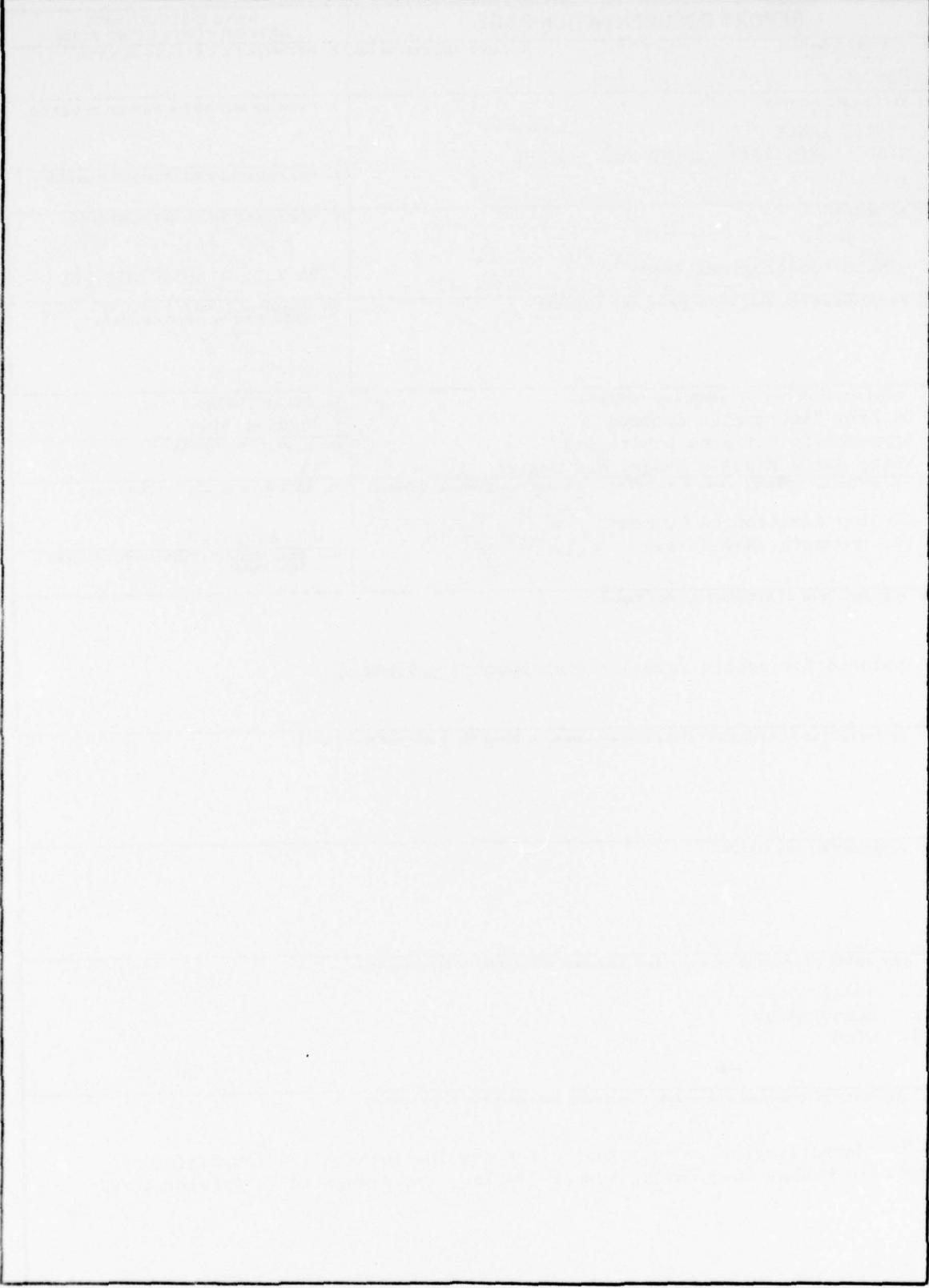
UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

400 844

AB

SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)



SECURITY CLASSIFICATION OF THIS PAGE(When Data Entered)

## CONTENTS

	PAGE
INTRODUCTION -----	1
DISCUSSION -----	1
<b>TABLES</b>	
I. Surface Observations Taken at WSD -----	1
II. Surface Observations Taken at LC-33 -----	2
III. Pilot-Balloon-Measured Wind Data, Release No. 1 at 1358 MST -----	3
IV. Pilot-Balloon-Measured Wind Data, Release No. 2 at 1404 MST -----	5
V. Holloman Significant Level Data (Release Time: 1310 MST) -----	8
VI. Holloman Upper Air Data (Release Time: 1310 MST) -----	10
VII. Holloman Mandatory Levels (Release Time: 1310 MST) -----	16
VIII. Jallen Significant Level Data (Release Time: 1320 MST) -----	17
IX. Jallen Upper Air Data (Release Time: 1320 MST) -----	19
X. Jallen Mandatory Levels (Release Time: 1320 MST) -----	24
XI. WSD Significant Level Data (Release Time: 1320 MST) -----	25
XII. WSD Upper Air Data (Release Time: 1320 MST) -----	27
XIII. WSD Mandatory Levels (Release Time: 1320 MST) -----	32

RELEASER'S SIGNATURE	
NTIS	White Section <input checked="" type="checkbox"/>
ONE	Buff Section <input type="checkbox"/>
UNARMEDDED <input type="checkbox"/>	
JUSTIFICATION.....	
.....	
BY	
DISTRIBUTION, AVAILABILITY CODES	
Dist.	AVAIL. AND OF SPECIAL
<i>P</i>	<i>13</i>
DTB	

## INTRODUCTION

12815C Lance, Missile Number 4043, Round Number 294 RSL, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1401 HRS MST, 18 January 1977. The scheduled launch time was 1330 HRS MST.

## DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	3,990.0	FEET/MSL
PRESSURE	889.6	MBS
TEMPERATURE	11.2	°C
RELATIVE HUMIDITY	31	%
DEW POINT	-5.2	°C
DENSITY	1,084.0	GM/M <sup>3</sup>
WIND SPEED	06	MPH
WIND DIRECTION	250	DEGREES
CLOUD COVER	9	Cs

TABLE I. SURFACE OBSERVATIONS TAKEN AT WSD,  
1350 HRS MST/18 JANUARY 1977.

ELEVATION	3,987.0	FEET/MSL
PRESSURE	889.6	MBS
TEMPERATURE	11.6	°C
RELATIVE HUMIDITY	44	%
DEW POINT	-0.1	°C
DENSITY	1,084.0	GM/M <sup>3</sup>
WIND SPEED	08	MPH
WIND DIRECTION	190	DEGREES
CLOUD COVER	8	C1

TABLE II. SURFACE OBSERVATIONS TAKEN AT LC-33,  
1401 HRS MST/18 JANUARY 1977.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	170	8.0	2100	203	9.5
100	180	8.0	2200	203	9.5
200	186	8.0	2300	202	8.5
300	191	8.5	2400	197	10.0
400	196	9.0	2500	198	10.5
500	197	9.5	2600	202	10.0
600	207	10.0	2700	206	9.5
700	197	10.0	2800	217	8.5
800	195	10.0	2900	235	9.0
900	196	9.0	3000	246	9.0
1000	203	11.5	3100	242	8.0
1100	199	11.0	3200	256	6.5
1200	199	10.5	3300	273	5.5
1300	197	11.0	3400	275	5.5
1400	192	11.5	3500	275	4.5
1500	202	12.0	3600	266	4.0
1600	207	12.0	3700	233	4.5
1700	207	11.5	3800	235	6.0
1800	211	11.5	3900	238	5.0
1900	204	11.0	4000	259	5.0
2000	204	9.5	4100	266	6.0

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1  
RELEASED FROM LC-33, AT 1358 HRS MST/18 JANUARY 1977  
12815C LANCE, MISSILE NO. 4043, ROUND NO. 294 RSL

PIBAL RELEASE POINT WSTM COORDINATES:

X = 486,296.83    Y = 185,251.85    Z = 3,986.67

APPROXIMATELY: 813 FEET SOUTHEAST OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	278	6.5	5700	041	4.5
4300	278	5.0	5800	043	5.5
4400	279	7.0	5900	046	7.0
4500	294	1.5	6000	049	8.0
4600	336	4.5	6100	050	9.0
4700	028	2.5	6200	046	11.0
4800	344	3.5	6300	047	12.0
4900	335	3.5	6400	043	13.0
5000	326	4.5	6500	041	14.5
5100	326	5.0	6600	040	15.5
5200	334	5.0	6700	046	16.0
5300	349	4.5	6800	045	13.5
5400	011	3.5	6900	044	13.5
5500	040	2.5	7000	047	11.5
5600	046	3.0			

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	190	8.0	2100	187	8.5
100	237	10.0	2200	201	7.5
200	233	10.0	2300	211	9.5
300	231	10.5	2400	208	4.5
400	227	10.5	2500	195	5.0
500	210	9.5	2600	216	2.0
600	213	10.0	2700	245	2.5
700	201	13.0	2800	261	2.0
800	193	12.0	2900	309	4.5
900	182	7.0	3000	312	6.0
1000	196	6.0	3100	343	4.0
1100	161	9.0	3200	357	2.0
1200	171	8.5	3300	000	2.5
1300	170	9.5	3400	290	3.0
1400	180	9.5	3500	245	3.5
1500	171	6.5	3600	261	7.5
1600	182	12.5	3700	258	7.5
1700	184	10.5	3800	247	3.5
1800	167	7.0	3900	250	5.0
1900	181	5.0	4000	259	3.0
2000	177	5.5	4100	287	5.0

TABLE IV. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 2  
RELEASED FROM LC-33, AT 1404 HRS MST/18 JANUARY 1977  
12815C LANCE, MISSILE NO. 4043, ROUND NO. 294 RSL

PIBAL RELEASE POINT WSTM COORDINATES:

X = 486,296.83    Y = 185,251.85    Z = 3,986.67

APPROXIMATELY: 813 FEET SOUTHEAST OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	270	3.0
4300	231	5.5
4400	275	4.0
4500	285	5.5
4600	339	5.0
4700	348	5.0
4800	338	4.0
4900	326	8.5
5000	300	11.5
5100	266	4.5
5200	012	4.0
5300	359	5.0
5400	040	7.0
5500	081	6.5
5600	097	7.5
5700	106	7.5
5800	091	8.5
5900	084	10.5
6000	062	12.5
6100	070	15.5
6200	066	18.0
6300	050	16.5
6400	046	15.5
6500	037	11.5

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
6600	042	14.5
6700	061	19.0
6800	065	20.5
6900	064	18.0
7000	067	14.5
7100	057	11.0
7200	068	9.5
7300	072	10.5
7400	067	8.0
7500	055	9.5
7600	068	9.0
7700	070	9.5
7800	068	9.0
7900	066	12.0
8000	060	11.5
8100	050	9.5
8200	056	9.5
8300	046	12.0
8400	042	13.0
8500	040	13.0
8600	018	11.0
8700	028	8.0
8800	033	9.5
8900	037	8.0

TABLE IV. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
9000	024	9.5	10600	033	11.5
9100	015	8.5	10700	010	12.5
9200	011	8.0	10800	017	10.5
9300	003	10.0	10900	002	11.0
9400	008	12.0	11000	351	12.0
9500	025	9.0	11100	349	12.0
9600	032	7.0	11200	012	12.0
9700	040	8.0	11300	011	13.0
9800	014	8.5	11400	360	10.5
9900	019	15.0	11500	355	12.5
10000	029	13.5	11600	360	18.5
10100	022	13.0	11700	358	19.0
10200	021	17.5	11800	360	21.0
10300	020	15.0	11900	357	20.0
10400	022	13.0	12000	352	19.5
10500	035	8.5			

TABLE IV. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

STATION ALTITUDE 4125.59 FEET MSL  
19 JAN. 77 1310 HRS MST  
ASCENSION NO. 77

SIGNIFICANT LEVEL DATA

C18CC1CC37  
HOLLOWMAN

TABLE V

PRESSURE GEOMETRIC  
ALTITUDE  
MILLIBARS MSL FEET

TEMPERATURE  
AIR DEWPOINT  
DEGREES CENTIGRADE

PRESSURE	GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
885.9	4126.6	11.0 -5.0	32.0
374.5	4475.8	7.5 -7.3	34.0
850.0	5245.1	6.1 -7.8	36.0
794.6	7341.6	1.1 -9.8	44.0
780.2	8212.6	2.0 -11.5	36.0
719.4	9673.3	1.4 -13.5	32.0
700.2	10051.7	3.0 -12.8	30.0
700.0	10398.8	2.5 -13.7	29.0
590.0	14887.2	-3.6 -21.7	23.0
554.9	16480.5	-4.9 -27.5	15.0
500.0	19123.9	-11.6 -32.3	16.0
475.5	20379.7	-12.4 -35.0	13.0
400.0	24643.8	-23.9 -42.7	14.0
344.3	28152.6	-32.0 -49.8	15.0
300.0	31329.5	-40.7	
250.0	35321.7	-51.4	
238.8	36297.8	-53.2	
218.0	39222.5	-55.1	
200.0	40016.4	-59.7	
176.8	42512.6	-67.0	
160.0	44285.8	-70.1	
150.0	45750.0	-69.7	
111.2	51570.1	-73.8	
100.0	53622.2	-72.3	
82.2	57389.3	-76.2	
76.9	58689.8	-74.1	
70.0	60467.0	-75.6	
64.5	62010.5	-73.0	
59.0	62758.5	-74.6	
50.0	66978.5	-69.4	

KSTM SITE COORDINATES  
571739.24 FEET E  
362745.21 FEET N

STATION ALTITUDE 4125.59 FEET MSI  
18 JAN. 77 1312 HRS MST  
ASCENSION NO. 77

## SIGNIFICANT LEVEL DATA

C180010C37

HOLDMAN

WSTM SITE COORDINATES  
57173<sup>9</sup>.24 FEET E  
362745.21 FEET N

TABLE V (CONT)

PRESSURE	GEOMETRIC	TEMPERATURE	REL.HUM.
MILLIBARS	MSL FEET	DEGREES	AIR DEWPNT CENTIGRADE
37.4	72727.2	-67.6	
30.0	77220.7	-57.6	
24.0	31925.0	-53.2	

STATION ALTITUDE 4126.59 FEET MSL  
 18 JAN. 77 1511 HRS MST  
 ACCENSION NO. 77

UPPER AIR DATA  
 D180010037  
 HOLLOWAY

TABLE VI

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(UTN)	INDEX OF REFRACTION
4126.6	885.9	11.0	-5.0	1084.7	657.3	180.0	6.0
4500.0	672.8	7.5	-7.3	1083.7	653.1	187.2	6.0
5000.0	857.8	6.5	-7.7	1066.7	652.0	196.5	6.2
5500.0	841.9	5.4	-8.1	1051.4	650.7	205.2	6.5
6000.0	826.7	4.0	-8.6	1037.1	649.0	208.7	6.5
6500.0	610.9	2.6	-9.1	1023.0	647.4	204.2	6.0
7000.0	795.9	1.2	-9.7	1029.1	645.7	201.7	5.0
7500.0	781.0	1.5	-10.4	1009.4	646.0	207.2	3.0
8000.0	766.3	1.8	-11.1	975.5	649.6	243.9	1.1
8500.0	752.0	1.9	-11.9	951.2	646.5	233.3	2.3
9000.0	737.9	1.7	-12.5	934.3	646.2	353.2	4.5
9500.0	724.1	1.5	-13.2	917.5	646.0	12.6	6.8
10000.0	710.6	2.8	-12.9	896.0	647.5	23.4	9.1
10500.0	697.3	2.4	-13.9	880.7	647.0	34.7	10.5
11000.0	684.2	1.7	-14.7	866.3	646.2	23.6	10.1
11500.0	671.2	1.0	-15.6	852.1	645.4	247.7	10.4
12000.0	658.6	.3	-16.5	838.1	644.6	356.2	12.1
12500.0	646.2	-4	-17.4	824.4	643.7	17.0	15.0
13000.0	634.0	-1.0	-18.3	810.9	642.9	30.2	17.5
13500.0	622.0	-1.7	-19.2	797.7	642.1	41.0	18.9
14000.0	610.3	-2.4	-20.1	784.6	641.3	41.1	18.1
14500.0	598.8	-3.1	-21.0	771.8	640.5	14.0	14.0
15000.0	587.4	-3.7	-22.0	759.0	635.7	348.0	14.3
15500.0	576.2	-4.1	-23.7	745.6	639.2	345.8	15.9
16000.0	565.2	-4.5	-25.5	732.5	638.7	243.7	17.5
16500.0	554.9	-4.9	-27.5	719.8	638.1	341.2	19.1
17000.0	543.6	-6.2	-28.4	709.2	636.6	239.8	20.8
17500.0	533.1	-7.5	-29.3	15.4	698.7	635.1	341.0
18000.0	522.7	-8.7	-30.2	15.6	688.4	633.6	242.7
18500.0	512.6	-10.0	-31.1	15.8	678.3	632.1	346.5

STATION ALTITUDE 4126.59 FEET 43  
 18 JAN. 77 1310 HRS MST  
 ASCENSION NO. 17

UPPER AIR DATA

0180010037

HOLLOWMAN

WEST SITE COORDINATES  
 571759.24 FEET E  
 362745.21 FEET N

TABLE VI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL.HUM. PERCENT	DENSITY GM/CUBIC METER	WIND DATA		INDEX OF REFRACTION
		AIR DEWPOINT DEGREES	DEGREE CENTIGRADE			DIRECTION DEGREES SITN)	SPEED KNOTS	
19000.0	502.6	-11.3	-32.0	15.9	668.4	630.5	349.8	1.000151
19500.0	492.8	-11.8	-33.1	15.1	656.8	629.8	352.9	1.000148
20000.0	483.1	-12.2	-34.2	13.8	644.7	629.4	355.8	1.000145
20500.0	477.5	-12.8	-35.4	13.0	633.5	628.6	359.0	1.000143
21000.0	464.0	-14.2	-36.4	13.2	623.9	627.0	1.6	1.000140
21500.0	454.6	-15.5	-37.4	13.3	614.6	625.4	2.9	1.000138
22000.0	445.5	-16.8	-38.4	12.4	605.7	623.8	4.1	1.000136
22500.0	436.5	-18.2	-39.4	13.5	596.2	622.1	5.0	1.000134
23000.0	427.7	-19.5	-40.4	13.6	587.3	620.5	5.8	1.000132
23500.0	419.1	-20.8	-41.4	13.7	578.5	616.9	6.3	1.000130
24000.0	410.6	-22.2	-42.4	13.9	569.9	617.2	7.2	1.000128
24500.0	402.7	-23.5	-43.4	14.0	561.4	615.6	8.2	1.000126
25000.0	394.0	-24.7	-44.1	14.1	552.5	614.1	9.4	1.000124
25500.0	385.2	-25.9	-45.2	14.2	543.4	612.6	10.7	1.000122
26000.0	377.7	-27.1	-46.1	14.4	534.5	611.2	10.6	1.000120
26500.0	369.8	-28.2	-46.9	14.5	525.8	609.8	9.0	1.000118
27000.0	362.0	-29.3	-47.8	14.7	517.2	608.3	6.4	1.000116
27500.0	354.5	-30.5	-48.7	14.8	508.8	606.9	8	1.000114
28000.0	347.3	-31.6	-49.5	15.0	500.6	605.4	354.5	1.000112
28500.0	339.8	-33.1	-51.6	13.4**	492.5	603.8	347.5	1.000110
29000.0	332.2	-34.2	-54.3	11.0**	484.5	602.1	340.1	1.000108
29500.0	325.0	-35.7	-57.4	8.6**	476.8	600.3	337.0	1.000106
30000.0	318.2	-37.1	-60.9	6.3**	469.7	598.6	334.1	1.000105
30500.0	311.1	-38.4	-65.4	3.9**	461.7	596.9	330.3	1.000103
31000.0	304.4	-39.8	-72.8	1.6**	454.4	595.1	326.9	1.000101
31500.0	297.7	-41.2	-		447.0	593.4	221.8	1.000100
32000.0	291.0	-42.5	-		439.4	591.7	316.7	1.000098
32500.0	284.4	-43.8	-		432.0	589.6	311.6	1.000096
33000.0	278.8	-45.2	-		424.8	588.2	306.9	1.000095
33500.0	271.7	-46.5	-		417.7	586.5	302.3	1.000093

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4125.59 FEET MSL  
 19 JAN. 77 1710 40S MST  
 ASCENSION NO. 77

UPPER AIR DATA  
 C18C01C037  
 HOLLOWAY

TABLE VI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	SOUND SPEED CM/CUBIC METER	WIND DIRECTION DEGREES(1N) KNOTS	INDEX OF REFRACTION
34000.0	265.6	-47.9	410.5	584.7	299.9	45.8
34500.0	259.6	-49.2	403.8	583.0	297.7	47.3
35000.0	253.7	-50.5	397.0	581.3	298.0	49.0
35500.0	247.9	-51.7	390.1	579.7	298.2	50.7
36000.0	242.3	-52.9	382.7	578.4	298.6	53.4
36500.0	236.5	-53.5	375.1	577.4	298.9	56.4
37000.0	231.8	-54.7	367.1	576.8	300.0	60.9
37500.0	225.6	-54.4	359.3	576.2	301.5	66.3
38000.0	219.3	-54.0	351.6	575.5	302.2	71.0
38500.0	215.1	-55.8	344.8	574.3	302.2	74.8
39000.0	210.0	-57.1	338.6	572.6	301.5	76.1
39500.0	205.0	-58.4	332.5	570.9	299.9	74.7
40000.0	200.2	-59.7	326.6	569.2	298.9	74.7
40500.0	195.3	-61.1	320.8	567.3	298.6	76.2
41000.0	190.5	-62.6	315.2	565.3	299.1	77.9
41500.0	185.9	-64.0	309.6	563.4	300.5	80.0
42000.0	181.3	-65.5	304.2	561.4	300.9	80.8
42500.0	176.9	-67.0	298.9	559.4	298.3	78.1
43000.0	172.5	-67.8	292.6	558.3	295.3	75.2
43500.0	168.2	-68.6	286.5	557.1	290.2	69.0
44000.0	164.0	-69.5	280.4	556.0	284.1	63.4
44500.0	159.9	-70.1	274.2	555.2	284.5	62.4
45000.0	155.9	-69.9	267.1	555.4	286.0	62.0
45500.0	151.9	-69.8	260.7	555.6	287.7	63.5
46000.0	148.1	-69.9	253.8	555.4	289.4	66.4
46500.0	144.3	-70.1	247.9	555.0	290.9	69.3
47000.0	140.7	-70.6	241.9	554.5	290.7	68.2
47500.0	137.1	-70.9	236.2	554.0	290.5	67.2
48000.0	133.6	-71.3	230.6	553.5	291.1	65.8
48500.0	130.2	-71.6	225.1	553.0	292.6	64.3

STATION ALTITUDE 4126.59 FEET MST  
 18 JAN. 77 1310 HRS MST  
 ASCENSION NO. 77

UPPER AIR DATA  
 C180C1CC37  
 HOLLOWMAN  
 TABLE VI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	DEWPOINT DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SOUND SPEED OF WIND DATA	DIRECTION OF WIND SPEED IN KNOTS	INDEX OF REFRACTION
49000.0	126.9	-72.0	-72.0	219.9	5522.5	294.2	62.9	1.000049
49500.0	123.7	-72.3	-72.0	219.6	5522.1	294.7	63.0	1.000048
50000.0	120.6	-72.7	-72.0	209.5	5511.6	295.3	63.2	1.000047
50500.0	117.5	-73.0	-73.0	204.5	5511.1	295.0	62.8	1.000045
51000.0	114.5	-73.4	-73.0	199.7	5500.6	294.0	62.1	1.000044
51500.0	111.6	-73.8	-73.0	195.9	5500.1	293.4	61.4	1.000043
52000.0	108.8	-73.5	-73.0	189.7	5500.5	293.5	60.8	1.000042
52500.0	106.0	-73.1	-73.0	184.6	5511.0	293.6	60.2	1.000041
53000.0	103.3	-72.8	-72.0	179.5	5511.5	295.1	59.7	1.000040
53500.0	100.6	-72.4	-72.0	174.6	5522.0	296.5	59.1	1.000039
54000.0	98.1	-72.7	-72.0	170.4	5511.6	297.3	56.6	1.000038
54500.0	95.5	-73.2	-73.0	166.5	5500.9	297.3	52.1	1.000037
55000.0	93.1	-73.7	-73.0	162.6	5500.2	297.3	47.6	1.000036
55500.0	90.7	-74.2	-74.0	158.8	5499.4	299.4	47.0	1.000035
56000.0	88.4	-74.9	-74.0	155.7	5488.7	301.6	46.5	1.000035
56500.0	86.1	-75.3	-74.4	151.6	5488.0	304.0	46.0	1.000034
57000.0	83.9	-75.8	-74.4	148.1	5477.3	306.5	45.5	1.000033
57500.0	81.7	-76.0	-74.4	144.4	5477.0	309.1	45.2	1.000032
58000.0	79.6	-75.2	-74.1	140.1	5488.1	310.6	44.6	1.000031
58500.0	77.6	-74.4	-74.0	136.0	5499.2	310.2	43.4	1.000030
59000.0	75.6	-74.4	-74.0	132.4	5499.3	309.8	42.2	1.000029
59500.0	73.5	-74.8	-74.0	129.3	5488.7	309.9	42.2	1.000029
60000.0	71.7	-75.2	-74.4	126.7	5488.1	310.6	43.2	1.000028
60500.0	69.9	-75.5	-74.4	123.7	5477.6	311.3	44.2	1.000027
61000.0	68.1	-74.7	-74.0	119.5	5488.8	312.3	44.4	1.000027
61500.0	66.3	-73.9	-74.0	116.0	5500.0	313.4	44.4	1.000026
62000.0	64.5	-73.0	-74.0	112.5	5511.1	314.5	44.4	1.000025
62500.0	63.0	-73.4	-74.0	109.9	5500.5	315.2	44.0	1.000024
63000.0	61.4	-73.9	-74.0	107.3	5499.9	315.9	43.7	1.000024
63500.0	59.8	-74.0	-74.0	104.8	5499.3	317.0	43.1	1.000023

STATION ALTITUDE 4126.59 FEET MST  
 19 JAN. 77 1710 HRS MST  
 ASCENSION NO. 77

UPPER AIR DATA  
 018001CC37  
 MOLDMAN  
 TABLE VI (CONT)

WSTM SITE COORDINATES  
 571739.24 FEET E  
 362745.21 FEET N

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE		REFL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		DEGREES	CENTIGRADE				DIRECTION DEGREES(TN)	SPEED KNOTS	
54000.0	58.3	-74.2		102.0	549.5	318.6	42.4	1.000023	
64500.0	56.8	-73.4		99.0	550.6	320.3	41.6	1.000022	
55000.0	55.4	-72.6		96.1	551.7	321.0	41.6	1.000021	
65500.0	53.9	-71.8		93.2	552.8	321.4	41.6	1.000021	
66000.0	52.6	-71.0		90.6	553.9	321.7	41.7	1.000020	
66500.0	51.2	-70.2		87.9	555.0	321.3	41.6	1.000020	
67000.0	49.9	-69.4		85.4	556.1	320.9	41.6	1.000019	
67500.0	48.7	-69.7		83.2	556.3	320.6	41.4	1.000019	
68000.0	47.5	-69.1		81.1	556.5	320.4	41.2	1.000018	
68500.0	46.3	-68.9		79.0	556.7	320.1	40.9	1.000018	
69000.0	45.1	-68.8		77.0	557.0	319.3	40.8	1.000017	
69500.0	44.0	-68.6		75.0	557.2	318.5	40.6	1.000017	
70000.0	42.9	-68.5		73.0	557.4	317.6	40.1	1.000016	
70500.0	41.9	-68.3		71.2	557.6	316.8	39.3	1.000016	
71000.0	40.8	-68.1		69.3	557.8	315.9	38.5	1.000015	
71500.0	39.6	-68.0		67.6	558.0	315.8	37.5	1.000015	
72000.0	38.8	-67.8		65.8	558.2	315.9	36.5	1.000015	
72500.0	37.8	-67.7		64.1	558.4	316.2	35.5	1.000014	
73000.0	36.9	-67.6		62.4	559.4	317.5	34.9	1.000014	
73500.0	36.0	-65.9		60.5	560.9	318.8	34.4	1.000013	
74000.0	35.1	-64.8		58.7	562.4	318.5	33.9	1.000013	
74500.0	34.2	-63.7		57.0	563.9	316.2	33.7	1.000013	
75000.0	33.5	-62.5		55.3	565.4	313.9	33.5	1.000012	
75500.0	32.6	-61.4		53.7	566.9	308.5	34.0	1.000012	
76000.0	31.9	-60.3		52.1	568.3	301.7	35.4	1.000012	
76500.0	31.1	-59.2		50.6	569.8	295.5	37.1	1.000011	
77000.0	30.3	-58.1		49.1	571.3	289.9	37.9	1.000011	
77500.0	29.5	-57.3		47.8	572.3	284.5	38.7	1.000011	
78000.0	28.9	-56.9		46.6	572.9	279.4	39.9	1.000010	
78500.0	28.2	-56.4		45.4	573.5	279.0	40.0	1.000010	

STATION ALTITUDE 4126.59 FEET MSL  
 18 JAN. 77 1310 HRS MST  
 ASCENSION NO. 77

UPPER AIR DATA

C180010C37

HOLIDAY

WSTM SITE COORDINATES  
 571739.24 FEET E  
 362745.21 FEET N

TABLE VI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REFL. HUM. PERCENT			SOUND METER METER	WIND DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
			AIR DEPOINT	CM/CUBIC	SOUND				
79000.0	27.6	-56.0				49.2	574.1	40.1	1.000010
79500.0	26.9	-55.5				42.1	574.7		1.000010
80000.0	26.3	-55.1				42.0	575.3		1.000009
80500.0	25.7	-54.5				40.0	575.9		1.000009
81000.0	25.1	-54.1				39.0	576.5		1.000009
81500.0	24.5	-53.7				38.9	577.1		1.000009

STATION ALTITUDE 4126.59 FEET MSL  
 18 JAN. 77 1312 HRS MST  
 ASCENSION NO. 77

MANDATORY LEVELS  
 C1800C1C037  
 HOLLOWMAN  
 TABLE VII

WSTM SITE COORDINATES  
 571739.24 FEET E  
 362745.21 FEET N

PRESSURE MILLIBARS	FLEET	DEGREES CENTIGRADE	TEMPERATURE AIR DEWPNT	REL.HUM. PERCENT	WIND DATA	
					DIRECTION DEGREES (IN) °	SPEED KNOTS
850.0	5747.	6.1	-7.8	36.	200.9	6.3
800.0	6960.	1.6	-9.5	43.	200.9	5.6
750.0	8566.	1.0	-11.9	35.	33E.7	2.6
700.0	10322.	2.5	-17.7	29.	32.6	10.1
650.0	12348.	-1	-17.1	26.	11.9	14.0
600.0	14438.	-3.0	-20.9	4.	17.5	14.3
550.0	16689.	-5.5	-27.6	15.	340.3	19.8
500.0	19114.	-11.5	-32.3	16.	35C.7	28.8
450.0	21746.	-16.2	-37.6	13.	3.6	29.5
400.0	24611.	-23.9	-43.7	14.	8.5	33.8
350.0	27762.	-31.2	-49.2	15.	357.1	31.6
300.0	31278.	-40.7	-48.0	7.	323.7	35.0
250.0	35257.	-51.4	-51.4	1.	296.1	50.0
200.0	39934.	-59.7	-59.7	9.	298.9	74.8
175.0	42662.	-67.2	-67.2	1.	297.1	77.0
150.0	45663.	-69.7	-69.7	5.	288.5	64.9
125.0	49196.	-72.2	-72.2	5.	294.5	63.0
100.0	53477.	-72.3	-72.3	9.	296.9	59.0
90.0	57338.	-75.4	-75.4	7.	310.7	44.8
70.0	60783.	-75.5	-75.5	2.	311.2	44.2
50.0	63734.	-74.2	-74.2	8.	316.8	43.3
50.0	66754.	-69.4	-69.4	9.	720.9	41.6
40.0	71122.	-68.0	-68.0	8.	315.8	57.8
30.0	76925.	-57.6	-57.6	6.	287.6	38.2
25.0	80723.	-54.1	-54.1	1.		

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL  
16 JAN. 77 1320 HRS MST  
ASCENSION NO. 3

SIGNIFICANT LEVEL DATA  
C1800-30023  
JAILTN  
TABLE VIII

WSTM SITE COORDINATES  
450491.60 FEET E  
464023.05 FEET N

PRESSURE MILLIBARS	GEOMETRIC ALITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPONT DEGREES CENTIGRADE	REL.HUM. PERCENT
988.1	4051.0	12.4	-8.1	23.0
977.8	4369.6	8.4	-5.1	38.0
950.0	5238.8	6.0	-6.6	40.0
907.0	6623.8	1.6	-7.9	49.0
787.6	7269.3	2.8	-8.2	44.0
755.4	8375.6	1.1	-9.2	46.0
717.6	9738.9	3.8	-9.5	37.0
700.0	10401.0	3.3	-10.3	36.0
596.4	14616.9	-3.2	-17.1	33.0
585.4	15101.3	-3.0	-18.9	28.0
500.0	19191.2	-11.4	-27.0	26.0
494.3	19430.7	-10.9	-27.9	23.0
400.0	24643.1	-24.2	-38.9	24.0
324.4	29551.8	-35.8	-49.0	24.0
300.0	31322.2	-40.8		
250.0	35317.8	-50.9		
241.2	36083.3	-52.5		
231.6	36946.7	-53.0		
200.0	40014.1	-59.8		
169.4	43359.8	-68.9		
153.6	45287.4	-69.5		
150.0	45755.4	-68.0		
146.2	46265.4	-66.6		
116.4	50757.1	-71.9		
100.0	53700.1	-72.6		
92.8	57321.1	-76.6		
75.8	58763.6	-72.9		
70.0	60553.0	-74.1		
65.4	61871.3	-74.0		
60.0	63543.0	-74.1		

STATION ALTITUDE 4551.00 FEET MSL  
18 JAN. 77 1320 HRS MST  
ASCENSION NO. 3

SIGNIFICANT LEVEL DATA  
C180030023  
JALLEN

TABLE VIII (CONT)

PRESSURE	GEOMETRIC	TEMPERATURE	REL.HUM.
MILLIBARS	FEET	DEWPNT	PERCENT
50.0	67094.3	AIR DEGREES CENTIGRADE	
37.8	77650.8	-69.4	
		-65.8	

WSTM SITE COORDINATES  
450491.60 FEET E  
464023.05 FEET N

STATION ALTITUDE 4051.00 FEET MSL  
18 JAN. 7,  
ASCENSION NO. 23

UPPER AIR DATA  
C18C03CC23  
JALLEN  
TABLE IX

WEST SITE COORDINATES  
45C491.60 FEET E  
464023.05 FEET N

GEOMETRIC PRESSURE TEMPERATURE AIR DEWPOINT REL.HUM. DENSITY SPEED OF WIND DATA INDEX  
ALTITUDE MILLIBARS DEGREES CENTIGRADE PERCENT GM/CUBIC SOUND DIRECTION SPEED  
MSL FEET

4051.0	388.1	12.4	-8.1	23.0	1281.9	658.8	1.9	1.000255	
4500.0	873.6	8.0	-5.3	38.3	1080.3	653.9		1.000260	
5000.0	957.5	6.7	-6.1	39.5	1065.8	652.2		1.000255	
5500.0	841.7	5.2	-6.8	41.7	1051.8	650.5		1.000252	
6000.0	326.1	3.6	-7.2	44.9	1038.7	648.6		1.000249	
6500.0	810.8	2.0	-7.8	48.2	1024.9	646.7		1.000245	
7000.0	795.6	2.3	-8.1	46.1	1004.7	647.1		1.000243	
7500.0	780.8	2.4	-8.4	44.4	985.4	647.2		1.000236	
8000.0	766.2	1.7	-8.9	45.3	969.7	646.3		1.000232	
8500.0	751.9	1.3	-9.2	45.2	952.7	645.9		1.000228	
9000.0	737.8	2.3	-9.3	41.9	931.6	647.1		1.000223	
9500.0	724.1	3.3	-9.4	38.6	910.9	648.3		1.000216	
10000.0	710.6	3.6	-9.8	36.6	893.1	648.6		1.000213	
10500.0	697.4	3.1	-10.5	35.9	878.0	648.0		1.000209	
11000.0	684.2	2.4	-11.3	35.6	863.9	647.1		1.000205	
11500.0	671.4	1.6	-12.1	35.2	850.1	646.2		1.000202	
12000.0	658.7	.8	-12.9	34.9	836.5	645.3		1.000198	
12500.0	646.3	.1	-13.7	34.5	822.1	644.3		1.000194	
13000.0	634.2	-.7	-14.5	34.2	810.0	643.4		1.000191	
13500.0	622.3	-1.5	-15.3	33.8	797.0	642.5		1.000187	
14000.0	610.5	-2.2	-16.1	33.4	784.3	641.6		1.000184	
14500.0	599.1	-3.0	-17.0	33.1	771.8	640.6		1.000180	
15000.0	587.7	-3.0	-18.5	39.0	757.3	640.6		1.000175	
15500.0	575.4	-3.8	-19.7	27.8	744.9	679.6		1.000173	
16000.0	565.2	-4.9	-20.7	37.6	733.4	678.4		1.000170	
16500.0	554.3	-5.9	-21.7	27.3	722.0	677.1		1.000167	
17000.0	543.6	-6.9	-22.7	27.1	713.9	635.8		1.000164	
17500.0	533.1	-8.0	-23.7	26.8	699.0	634.6		1.000161	
18000.0	522.8	-9.0	-24.7	26.6	689.1	633.3		1.000158	
18500.0	512.7	-10.1	-25.7	26.3	578.5	632.1		1.000155	

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 4051.30 FEET MSL  
 18 JAN. 77 1320 HRS MST  
 ASCENSION '70. 73

UPPER AIR DATA  
 C180030C23  
 JAILEN  
 TABLE IX (CONT)

GEOMETRIC PRESSURE ALTITUDE MSL FEET	AIR MILLIBARS	DEWPONT DEGREES CENTIGRADE	TEMPERATURE AIR MILLIBARS	REL.HUM. PERCENT	CH/CUBIC METER	DENSITY SOUND KNOTS	WIND DATA		
							DIRECTION DEGREES (IN)	SPEED KNOTS	INDEX OF REFRACTION
19000.0	502.8	-11.1	-26.7	26.1	668.0	630.8	248.1	27.9	1.000153
19500.0	492.9	-11.1	-28.0	23.0	654.9	630.9	348.6	28.9	1.000149
20000.0	483.0	-12.4	-29.1	23.1	644.9	629.3	348.8	29.3	1.000147
20500.0	473.1	-13.6	-30.1	23.2	635.1	627.7	350.9	27.2	1.000144
21000.0	463.8	-14.9	-31.2	23.3	625.4	626.2	352.7	25.4	1.000142
21500.0	454.5	-16.2	-32.3	23.4	615.9	624.6	353.6	24.3	1.000140
22000.0	445.2	-17.5	-33.3	23.5	606.5	623.0	354.2	24.5	1.000137
22500.0	436.4	-18.7	-34.4	23.6	597.3	621.5	354.5	25.6	1.000135
23000.0	427.6	-20.0	-35.4	23.7	588.3	619.9	356.1	26.9	1.000133
23500.0	419.0	-21.3	-36.5	23.8	579.4	618.3	357.9	28.1	1.000131
24000.0	410.6	-22.6	-37.6	23.9	570.7	616.8	• 0	29.6	1.000129
24500.0	402.3	-23.8	-39.6	24.0	562.1	615.2	2.1	31.7	1.000126
25000.0	394.0	-25.0	-39.7	24.0	553.0	613.7	4.8	32.6	1.000124
25500.0	385.6	-26.2	-40.7	24.0	544.0	612.2	7.4	34.0	1.000122
26000.0	377.5	-27.4	-41.7	24.0	535.1	610.8	8.9	34.0	1.000120
26500.0	369.5	-28.6	-42.7	24.0	526.3	609.3	10.0	33.8	1.000118
27000.0	361.7	-29.8	-43.8	24.0	517.7	607.8	5.6	32.0	1.000116
27500.0	354.1	-31.0	-44.8	24.0	509.2	606.3	• 7	30.5	1.000114
28000.0	346.6	-32.1	-45.8	24.0	500.9	604.8	354.4	29.3	1.000112
28500.0	339.3	-33.3	-46.8	24.0	492.8	603.4	347.5	28.5	1.000110
29000.0	332.1	-34.5	-47.9	24.0	484.8	601.9	341.5	27.9	1.000108
29500.0	325.1	-35.7	-48.9	24.0	476.9	600.4	335.6	27.4	1.000107
30000.0	318.0	-37.1	-52.5	17.9*	469.7	598.6	330.6	28.3	1.000105
30500.0	311.1	-38.5	-57.6	11.1*	461.8	596.8	326.7	29.6	1.000103
31000.0	304.3	-39.9	-65.8	4.4*	454.5	595.0	325.1	30.9	1.000101
31500.0	297.5	-41.2			447.0	593.3	324.7	32.1	1.000100
32000.0	290.9	-42.5			439.3	591.6	320.0	34.4	1.000098
32500.0	284.3	-43.8			431.8	590.0	315.0	37.3	1.000096
33000.0	277.9	-45.2			424.4	588.4	310.1	40.1	1.000095
33500.0	271.6	-46.3			417.1	586.8	305.7	43.0	1.000093

\* \* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

SATION ALTITUDE 4051.00 FEET MSL  
18 JAN. 77 1100 HRS WST  
ASCENSION NO. 23

UPPER AIR DATA  
C18CC30023  
JAIEN  
TABLE IX (CONT)

GEOMETRIC ALTITUDE 450 FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	DEWPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	SPEED OF SOUND KNOTS METER	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
34000.0	265.5	-47.6	-47.6	410.0	595.1	303.6	45.0	1.000091
34500.0	259.5	-46.8	-46.8	403.0	583.5	302.7	46.7	1.000090
35000.0	253.7	-50.1	-50.1	396.1	581.8	301.9	49.2	1.000088
35500.0	247.9	-51.3	-51.3	389.2	580.3	302.0	52.2	1.000097
36000.0	242.1	-52.3	-52.3	382.0	578.9	302.0	55.2	1.000085
36500.0	236.5	-52.7	-52.7	373.8	578.4	301.9	58.5	1.000083
37000.0	231.0	-53.1	-53.1	365.7	577.9	302.3	62.0	1.000081
37500.0	225.6	-54.2	-54.2	358.9	576.4	303.2	66.0	1.000080
38000.0	220.2	-55.3	-55.3	352.7	575.0	303.7	70.0	1.000078
38500.0	215.0	-56.4	-56.4	345.7	573.5	303.7	73.9	1.000077
39000.0	209.9	-57.6	-57.6	339.2	572.0	303.4	77.1	1.000076
39500.0	205.0	-59.7	-59.7	332.9	570.6	302.7	79.3	1.000074
40000.0	200.1	-59.8	-59.8	326.7	569.1	301.8	79.4	1.000073
40500.0	195.7	-61.1	-61.1	320.8	567.3	300.3	76.5	1.000071
41000.0	190.4	-62.5	-62.5	314.9	565.5	299.1	74.1	1.000070
41500.0	185.8	-63.8	-63.8	309.2	563.6	298.3	73.0	1.000069
42000.0	181.2	-65.2	-65.2	303.6	561.8	298.1	72.1	1.000068
42500.0	176.8	-66.6	-66.6	298.1	559.9	299.8	72.2	1.000066
43000.0	172.5	-67.9	-67.9	292.7	558.1	301.6	72.4	1.000065
43500.0	168.2	-69.9	-69.9	286.9	556.1	299.1	69.7	1.000064
44000.0	164.0	-69.1	-69.1	280.0	556.5	296.1	67.1	1.000062
44500.0	159.9	-69.3	-69.3	273.1	556.3	292.4	65.1	1.000061
45000.0	155.9	-69.4	-69.4	266.5	556.1	288.3	63.5	1.000059
45500.0	152.0	-68.8	-68.8	259.1	556.9	285.5	62.8	1.000058
46000.0	148.2	-67.3	-67.3	250.8	558.9	286.7	63.5	1.000056
46500.0	144.5	-66.9	-66.9	244.0	559.5	287.8	64.3	1.000054
47000.0	140.8	-67.5	-67.5	238.5	558.7	287.9	67.0	1.000053
47500.0	137.3	-68.1	-68.1	233.2	557.9	287.8	70.0	1.000052
48000.0	133.6	-68.6	-68.6	228.0	557.1	288.0	69.7	1.000051
48500.0	130.5	-69.2	-69.2	223.0	556.3	289.3	67.0	1.000050

STATION ALTITUDE 4031.00 FEET MST  
13 JAN. 77 1720 HRS MST  
ASCENSION NO. 27

UPPER AIR DATA  
C18CC30023  
JALLEN  
TABLE XI (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF WIND DATA DIRECTION DEGREES (TN)	INDEX OF REFRACTION
49000.0	127.2	-69.8	218.0	555.5	288.9	64.1
49500.0	126.0	-70.4	212.2	554.7	290.3	60.8
50000.0	125.9	-71.0	208.4	553.9	291.4	58.3
50500.0	117.0	-71.6	203.8	553.1	291.0	59.5
51000.0	114.9	-72.0	199.0	552.6	290.7	60.6
51500.0	112.0	-72.1	194.1	552.4	291.0	60.4
52000.0	109.1	-72.2	189.2	552.3	291.4	60.2
52500.0	106.4	-72.3	184.5	552.1	291.2	58.2
53000.0	103.7	-72.4	179.9	551.9	290.8	56.1
53500.0	101.5	-72.6	175.5	551.8	291.0	53.8
54000.0	98.6	-72.9	171.3	551.3	291.5	51.4
54500.0	95.6	-73.5	167.3	550.5	292.9	49.8
55000.0	93.4	-74.0	163.5	549.7	296.4	50.6
55500.0	91.7	-74.6	159.7	549.0	299.8	51.7
56000.0	88.7	-75.1	156.1	548.2	303.0	50.9
56500.0	86.4	-75.7	152.5	547.4	306.3	50.1
57000.0	84.7	-76.2	149.0	546.7	308.7	49.3
57500.0	82.0	-76.1	145.1	546.8	310.3	48.5
58000.0	79.9	-74.9	140.4	548.6	311.6	47.8
58500.0	77.9	-75.6	135.9	550.4	311.2	46.8
59000.0	75.9	-75.1	132.1	551.1	310.9	45.9
59500.0	73.9	-73.4	128.9	550.6	310.6	43.1
60000.0	72.0	-73.7	125.8	550.2	310.3	39.7
60500.0	70.1	-74.1	122.9	549.7	310.2	37.4
61000.0	68.4	-73.0	119.1	551.1	310.9	40.027
61500.0	66.7	-71.9	115.4	552.7	311.5	39.7
62000.0	65.0	-71.2	117.1	553.6	311.7	40.4
62500.0	63.7	-72.2	109.7	552.3	311.7	40.8
63000.0	61.7	-73.1	107.4	551.0	311.9	41.3
63500.0	60.4	-74.0	105.2	549.7	312.7	41.7

STATION ALTITUDE 4051.30 FEET MST  
 18 JAN. 77 1322C 4RS MST  
 ASCENSION NO. 23

UPPER AIR DATA  
 C18C030023  
 JALLEN

TABLE IX (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL.HUM. PERCENT	DENSITY CM/CUBIC METER	SOUND KNOTS	DIRECTION DEGREES TN	SPEED KNOTS	WIND DATA INDEX OF REFRACTION
54000.0	58.6	-73.5	102.3	550.5	313.4	42.2	1.000023	
64500.0	57.1	-72.6	99.7	551.4	315.1	41.1	1.000022	
65000.0	55.7	-72.2	96.5	552.3	317.3	39.4	1.000021	
65500.0	54.7	-71.5	93.8	553.2	319.7	38.0	1.000021	
66000.0	52.9	-70.8	91.1	554.1	322.1	38.0	1.000020	
66500.0	51.5	-70.2	88.5	555.0	324.4	37.9	1.000020	
67000.0	50.2	-59.5	86.0	555.9	324.6	40.1	1.000019	
67500.0	49.0	-69.1	83.7	556.4	323.7	43.8	1.000019	
68000.0	47.8	-68.8	81.4	556.9	323.1	47.0	1.000018	
68500.0	46.6	-68.5	79.3	557.3	324.3	47.0	1.000018	
69000.0	45.4	-58.2	77.2	557.8	325.4	47.0	1.000017	
69500.0	44.3	-67.8	75.2	558.2	326.5	45.5	1.000017	
70000.0	43.2	-67.5	73.2	558.7	327.6	42.8	1.000016	
70500.0	42.1	-67.2	71.2	559.1			1.000016	
71000.0	41.1	-66.9	69.4	559.5			1.000015	
71500.0	40.1	-66.5	67.6	560.0			1.000015	
72000.0	39.1	-66.2	65.8	560.4			1.000015	
72500.0	38.1	-65.9	64.0	560.8			1.000014	

STATION ALTITUDE 4051.00 FEET MSL  
 18 JAN. 77 1320 HRS MST  
 ASCENSION NO. 73

MANDATORY LEVELS  
 C180030023  
 JALLEN

TABLE X

WSTM SITE COORDINATES  
 450491.60 FEET E  
 464023.05 FEET N

MILLIBARS	FEET	DEGREES	CENTIGRADS	PRESSURE	GEOPOTENTIAL	TEMPERATURE	REL.HUM.	WIND DATA
				AIR	DEWPNT	PERCENT	DIRECTION	SPEED
850.0	5237.	6.0	-6.6	40.	9999.0	9999.0XX		
900.0	6852.	2.0	-8.0	47.	9999.0	9999.0XX		
750.0	8561.	1.5	-9.2	45.	301.3	6.6		
700.0	10394.	3.3	-10.3	36.	15.7	7.8		
650.0	12355.	.7	-13.5	35.	37.6	10.3		
600.0	14448.	-3.0	-16.9	33.	359.3	13.2		
550.0	16699.	-6.2	-22.1	27.	337.8	19.5		
500.0	19121.	-11.4	-27.0	26.	348.6	28.3		
450.0	21750.	-16.8	-32.8	23.	354.0	24.0		
400.0	24611.	-24.2	-38.9	24.	2.7	31.6		
350.0	27759.	-31.6	-45.3	24.	357.0	29.7		
300.0	31271.	-40.8			324.8	31.7		
250.0	35254.	-50.9			302.0	51.1		
200.0	39932.	-59.8			301.7	79.3		
175.0	42623.	-67.1			300.6	72.2		
150.0	45649.	-68.0			286.1	63.2		
125.0	49239.	-70.2			289.9	61.7		
100.0	53555.	-72.6			291.2	52.9		
80.0	57809.	-74.9			311.6	47.8		
70.0	60369.	-74.1			310.2	37.5		
60.0	63341.	-74.1			312.7	41.8		
50.0	66870.	-69.4			324.4	40.9		
40.0	71270.	-66.5						

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

XX WIND DATA INVALID DUE TO MISSING RAW AZIMUTH AND ELEVATION ANGLES.

STATION ALTITUDE 3989.00 FEET MST  
 18 JAN. 77 1320 HRS MST  
 ASCENSION NO. 44

SIGNIFICANT LEVEL DATA

C180020044  
 WHITE SANDS

WSTM SITE COORDINATES  
 4885.80.00 FEET E  
 185045.30 FEET N

TABLE XI

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	AIR DEWPPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT
890.2	3989.0	11.9	-3.4	74.0
883.3	4201.6	9.1	-5.9	34.0
850.0	5240.3	5.8	-7.4	38.0
907.7	6616.6	2.4	-10.1	39.0
736.7	9052.1	.7	-13.0	35.0
700.0	10388.4	1.8	-12.7	33.0
677.7	11262.1	2.1	-14.5	28.0
613.7	13877.2	-1.4	-18.4	26.0
579.3	15360.9	-4.8	-22.2	24.0
555.7	16455.8	-4.2	-24.3	19.0
500.0	19143.7	-10.1	-29.3	19.0
452.7	21657.5	-15.7	-34.0	19.0
400.0	24660.0	-23.4	-40.5	19.0
356.7	27410.4	-29.5	-45.6	19.0
338.3	28619.2	-33.0	-49.1	18.0
300.0	31362.4	-39.6		
250.0	35395.0	-47.9		
228.3	37353.3	-51.2		
200.0	40139.8	-58.6		
163.8	44169.7	-69.4		
150.0	45891.0	-71.7		
145.3	46513.0	-69.9		
141.3	47066.5	-65.7		
128.3	48985.4	-68.8		
100.0	52844.7	-73.7		
93.3	55179.5	-74.2		
86.8	56579.4	-70.9		
80.7	58087.8	-74.4		
74.3	59588.0	-72.2		
70.0	60735.0	-76.1		

STATION ALTITUDE 3989.00 FEET MSL  
18 JAN. 77 1320 HRS MST  
ASCENSION NO. 44

SIGNIFICANT LEVEL DATA  
0180020044  
WHITE SANDS  
TABLE XI (CONT)

W STM SITE COORDINATES  
488580.00 FEET E  
185045.00 FEET N

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT
66.3	61773.0	-74.6	
59.0	67286.0	-67.4	

STATION ALTITUDE 3989.00 FEET MSL  
 18 JAN. 77 1320 HRS MST  
 ASCENSION NO. 44

UPPER AIR DATA  
 0100020044  
 WHITE SANDS  
 TABLE XII

WSTM SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR DEGREES	TEMPERATURE DEGREES CENTIGRADE	REL.HUM. PERCENT			DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TIN) KNOTS	INDEX OF REFRACTION
				0	100	200				
3989.0	890.2	11.9	-3.4	34.0	1085.7	658.4	1.80	0	5.1	1.000264
4000.0	889.8	11.8	-3.6	74.0	1085.9	658.2	1.80	.2	5.1	1.000264
4500.0	873.6	8.2	-6.3	75.1	1080.1	653.9	1.88	.4	5.9	1.000259
5000.0	857.6	6.6	-7.0	37.1	1066.4	652.1	194.5		6.8	1.000255
5500.0	841.8	5.2	-7.9	38.2	1052.1	650.4	199.1		7.8	1.000251
6000.0	826.2	3.9	-8.9	38.6	1037.3	648.9	212.5		8.0	1.000246
6500.0	810.8	2.7	-9.9	38.9	1022.7	647.5	232.6		8.5	1.000242
7000.0	795.7	2.1	-10.6	38.4	1005.6	646.8	239.8		7.9	1.000238
7500.0	780.8	1.8	-11.1	37.5	988.1	646.4	242.2		6.3	1.000233
8000.0	766.2	1.4	-11.7	36.7	970.0	645.9	208.2		2.7	1.000229
8500.0	751.8	1.1	-12.3	35.9	953.9	645.5	113.9		2.2	1.000224
9000.0	737.8	.7	-12.9	35.1	937.3	645.1	72.3		4.5	1.000220
9500.0	723.9	1.1	-12.9	34.3	918.6	645.5	57.3		7.3	1.000216
10000.0	710.4	1.5	-12.8	33.6	900.0	646.0	49.6		10.3	1.000212
10500.0	697.1	1.8	-12.9	32.4	882.0	646.4	47.9		11.2	1.000208
11000.0	684.0	2.0	-13.9	29.5	865.0	646.6	47.7		11.2	1.000203
11500.0	671.2	1.8	-14.8	27.8	849.6	646.3	50.2		10.8	1.000199
12000.0	658.6	1.1	-15.6	27.4	835.7	645.5	53.8		10.2	1.000195
12500.0	646.2	.9	-16.3	27.1	822.0	644.7	43.0		9.7	1.000192
13000.0	634.1	-.2	-17.1	26.7	808.6	643.9	29.7		9.7	1.000188
13500.0	622.1	-.9	-17.8	26.3	795.3	643.1	9.9		10.2	1.000185
14000.0	610.4	-1.7	-18.7	25.8	782.6	642.2	355.3		11.7	1.000182
14500.0	598.8	-2.8	-20.0	25.2	771.1	640.8	355.5		13.4	1.000178
15000.0	587.4	-4.0	-21.3	24.5	759.7	639.4	355.4		15.4	1.000175
15500.0	576.2	-4.7	-22.5	23.4	747.3	638.5	354.3		18.4	1.000172
16000.0	565.2	-4.4	-23.4	21.1	732.7	638.8	352.2		20.9	1.000168
16500.0	554.3	-4.3	-24.4	19.0	717.9	639.0	348.4		22.7	1.000164
17000.0	543.6	-5.4	-25.3	19.0	706.9	637.6	345.5		23.8	1.000162
17500.0	533.1	-6.5	-26.2	19.0	696.1	636.3	343.0		23.9	1.000159
18000.0	522.8	-7.6	-27.2	19.0	685.5	635.0	343.8		24.2	1.000156

STATION ALTITUDE 3989.00 FEET MSL  
 18 JAN. 77 1320 HRS WST  
 ASCENSION NO. 44

UPPER AIR DATA  
 C1800020044  
 WHITE SANDS  
 TABLE XII (CONT)

WEST SITE COORDINATES  
 488880.00 FEET E  
 185045.00 FEET N

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREE CENTIGRADE	AIR DEPOINT DEGREES	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TW)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
18500.0	512.7	-8.7	-78.1	19.0	675.1	633.7	348.1	24.6	1.000154
19000.0	502.8	-5.6	-29.0	19.0	664.8	632.4	354.1	25.4	1.000151
19500.0	492.9	-10.9	-29.9	19.0	654.5	631.0	1.4	26.9	1.000149
20000.0	483.2	-12.0	-30.9	19.0	644.4	629.7	4.0	28.1	1.000146
20500.0	473.7	-13.1	-31.8	19.0	634.4	628.3	4.7	29.0	1.000144
21000.0	464.3	-14.2	-32.7	19.0	624.5	627.0	4.9	29.6	1.000141
21500.0	455.1	-15.3	-33.7	19.0	614.9	625.6	4.9	30.2	1.000139
22000.0	446.0	-16.6	-34.7	19.0	605.4	624.1	6.4	29.7	1.000137
22500.0	437.0	-17.9	-35.8	19.0	596.1	622.5	8.3	28.9	1.000134
23000.0	428.1	-19.1	-36.9	19.0	587.0	621.0	9.9	28.4	1.000132
23500.0	419.4	-20.4	-37.9	19.0	578.1	619.4	11.4	28.0	1.000130
24000.0	411.0	-21.7	-39.0	19.0	569.3	617.8	13.0	28.9	1.000128
24500.0	402.6	-23.0	-40.1	19.0	560.6	616.2	14.4	30.3	1.000126
25000.0	394.3	-24.2	-41.1	19.0	551.6	614.8	13.5	30.2	1.000124
25500.0	386.1	-25.3	-42.0	19.0	542.5	613.4	11.7	29.5	1.000122
26000.0	378.1	-26.4	-43.0	19.0	533.6	612.0	7.0	27.7	1.000120
26500.0	370.2	-27.5	-43.9	19.0	524.9	610.7	359.6	25.5	1.000118
27000.0	362.5	-28.6	-44.9	19.0	516.3	609.3	351.2	23.8	1.000116
27500.0	354.9	-29.8	-45.9	18.9	508.0	607.8	341.9	22.6	1.000114
28000.0	347.4	-31.2	-47.3	18.5	500.2	606.0	333.7	23.0	1.000112
28500.0	340.3	-32.7	-48.7	18.1	492.5	604.2	327.6	24.6	1.000110
29000.0	332.7	-33.9	-51.1	15.5**	484.4	602.6	323.6	27.2	1.000108
29500.0	325.5	-35.1	-54.1	12.2**	476.4	601.1	321.1	30.5	1.000106
30000.0	318.4	-36.3	-57.6	8.9**	468.4	599.5	318.7	33.1	1.000104
30500.0	311.5	-37.5	-62.1	5.7**	460.6	598.0	316.0	34.6	1.000103
31000.0	304.8	-38.7	-69.2	2.4**	452.9	596.5	313.4	36.1	1.000101
31500.0	298.1	-39.9			445.2	595.0	310.9	37.4	1.000099
32000.0	291.5	-40.9			437.2	593.7	308.4	38.7	1.000097
32500.0	285.0	-41.9			429.4	592.4	305.5	40.3	1.000096
33000.0	278.6	-43.0			421.6	591.1	302.4	42.5	1.000094

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL  
 18 JAN. 77 1120 HRS MST  
 ASCENSION NO. 44

UPPER AIR DATA  
 C180020044  
 WHITE SANDS  
 TABLE XII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEPOINT DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF WIND DATA KNOTS	INDEX OF REFRACTION	WEST SITE COORDINATES	
							WEST COORDINATES 488580.00 FEET E 185045.00 FEET N	
33500.0	272.4	-44.0	414.1	589.7	298.9	1.000092		
34000.0	266.3	-45.0	406.6	588.4	296.1	1.000091		
34500.0	260.3	-46.1	399.3	587.1	294.2	1.000091		
35000.0	254.5	-47.1	392.2	585.7	293.1	1.000087		
35500.0	248.9	-48.1	385.1	584.5	293.1	1.000086		
36000.0	243.1	-48.9	377.7	583.4	293.4	1.000084		
36500.0	237.5	-49.8	370.4	582.3	295.0	1.000082		
37000.0	232.1	-50.6	362.3	581.2	296.5	1.000081		
37500.0	226.7	-51.6	356.5	579.9	295.8	1.000079		
38000.0	221.4	-52.9	350.2	578.1	295.0	1.000078		
38500.0	216.2	-54.2	344.1	576.4	293.9	1.000077		
39000.0	211.1	-55.6	338.0	574.6	292.5	1.000075		
39500.0	206.2	-56.9	332.1	572.9	292.4	1.000074		
40000.0	201.3	-58.2	326.3	571.1	293.7	1.000073		
40500.0	196.5	-59.6	320.4	569.4	294.5	1.000071		
41000.0	191.7	-60.9	314.6	567.6	294.8	1.000070		
41500.0	187.0	-62.2	308.8	565.8	294.8	1.000069		
42000.0	182.4	-63.6	303.2	564.0	294.0	1.000068		
42500.0	177.9	-64.9	297.7	562.2	293.3	1.000066		
43000.0	173.6	-66.3	292.3	560.4	292.6	1.000065		
43500.0	169.3	-67.6	287.0	558.5	292.0	1.000064		
44000.0	165.2	-68.9	281.8	556.7	290.5	1.000063		
44500.0	161.1	-69.8	276.7	555.5	288.8	1.000061		
45000.0	157.0	-70.5	269.9	554.6	287.6	1.000060		
45500.0	153.0	-71.2	263.9	553.7	286.4	1.000059		
46000.0	149.2	-71.4	257.5	553.4	285.9	1.000057		
46500.0	145.4	-69.9	249.3	555.4	286.4	1.000056		
47000.0	141.8	-66.2	238.7	560.4	287.0	1.000053		
47500.0	138.7	-66.4	232.9	560.2	287.7	1.000052		
48000.0	134.8	-67.2	228.1	559.1	288.4	1.000051		

STATION ALTITUDE 3980.00 FEET MST  
 18 JAN. 77 1320 HRS MST  
 ASCENSION NO. 44

UPPER AIR DATA  
 C180020144  
 WHITE SANDS  
 TABLE XII (CONT)

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL.HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES(TIN) KNOTS	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
48500.0	131.5	-68.0	223.3	558.0	288.4	59.3	1.00005	
49000.0	128.2	-68.8	218.6	556.9	288.2	59.8	1.000049	
49500.0	125.0	-59.3	213.6	556.2	288.6	60.2	1.000048	
50000.0	121.8	-69.8	208.7	555.5	290.3	60.1	1.000046	
50500.0	118.7	-70.3	203.9	554.8	292.1	60.1	1.000045	
51000.0	115.7	-70.8	199.2	554.1	293.0	58.4	1.000044	
51500.0	112.8	-71.3	194.7	553.4	293.9	56.5	1.000043	
52000.0	109.9	-71.8	190.2	552.8	293.8	55.8	1.000042	
52500.0	107.1	-72.3	185.9	552.1	293.2	55.4	1.000041	
53000.0	104.4	-72.8	181.6	551.4	293.4	55.4	1.000040	
53500.0	101.8	-73.4	177.5	550.7	294.9	56.0	1.000039	
54000.0	99.2	-73.8	173.3	550.1	296.1	56.4	1.000039	
54500.0	96.7	-73.9	169.0	549.9	295.6	56.0	1.000038	
55000.0	94.2	-74.1	164.8	549.6	295.1	55.5	1.000037	
55500.0	91.8	-73.4	160.1	550.5	295.1	53.5	1.000036	
56000.0	89.4	-72.3	155.1	552.2	295.3	50.6	1.000035	
56500.0	87.2	-71.1	150.3	553.8	295.7	47.8	1.000033	
57000.0	84.9	-71.9	147.0	552.7	301.0	44.6	1.000033	
57500.0	82.8	-73.0	144.1	551.1	307.0	41.9	1.000032	
58000.0	80.7	-74.2	141.7	549.5	312.0	39.9	1.000031	
58500.0	78.6	-73.8	137.4	550.1	314.0	38.6	1.000031	
59000.0	76.6	-73.1	133.4	551.1	316.1	37.3	1.000030	
59500.0	74.6	-72.3	129.5	552.1	312.0	36.5	1.000029	
60000.0	72.7	-73.6	127.0	550.3	307.2	35.0	1.000028	
60500.0	70.9	-75.3	124.8	548.0	305.0	36.6	1.000028	
61000.0	69.0	-75.8	121.6	547.3	305.1	38.2	1.000027	
61500.0	67.3	-75.1	118.7	548.2	305.7	39.5	1.000025	
62000.0	65.5	-74.5	114.9	549.1	309.4	40.0	1.000026	
62500.0	63.9	-73.8	111.6	550.0	313.0	40.6	1.000025	
63000.0	62.3	-73.2	108.5	550.9	314.9	40.1	1.000024	

STATION ALTITUDE 3989.00 FEET MSL  
 10 JAN. 77 1320 HRS MST  
 ASCENSION NO. 44

UPPER AIR DATA  
 C180C20C44  
 WHITE SANDS  
 TABLE XII (CONT)

WSTM SITE COORDINATES  
 480580.00 FEET E  
 185045.00 FEET N

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL.HUM. DENSITY OF PERCENT GM/CUBIC METER		SPEED OF SOUND KNOTS	DIRECTION DEGREES(LTN) KNOTS	INDEX OF REFRACTION
			PERCENT	GM/CUBIC METER			
53500.0	60.7	-72.5	105.4	551.9	316.1	39.0	1.000023
64000.0	59.2	-71.8	102.4	552.6	316.8	38.2	1.000023
54500.0	57.7	-71.1	99.4	553.7	315.0	38.0	1.000022
65000.0	56.2	-70.5	96.6	554.6	313.2	37.9	1.000022
65500.0	54.8	-69.8	93.9	555.5			1.000021
66000.0	53.4	-69.1	91.2	556.5			1.000021
56500.0	52.1	-68.5	88.6	557.4			1.000020
67000.0	50.7	-67.8	86.1	558.3			1.000019

STATION ALTITUDE 3989.00 FEET MSL  
 18 JAN. 77 1320 HRS MST  
 ASCENSION NO. 44

MANDATORY LEVELS  
 C180020044  
 WHITE SANDS

TABLE XIII

KSTW SITE COORDINATES  
 488580.00 FEET E  
 185045.00 FEET N

PRESSURE MILLIBARS	GEOPOTENTIAL FEET	TEMPERATURE		REL.HUM. PERCENT	WIND DATA	
		DEGREES	DEGREES CENTIGRADE		DIRECTION DEGREES (TN)	SPEED KNOTS
850.0	5239.	5.8	-7.4	38.	196.8	7.3
800.0	6855.	2.2	-10.4	39.	238.0	8.1
750.0	8561.	1.0	-12.4	36.	104.7	2.4
700.0	10382.	1.8	-12.7	33.	48.0	1.2
650.0	12341.	.6	-16.1	27.	46.9	9.8
600.0	14437.	-2.7	-19.8	25.	355.5	13.3
550.0	16688.	-4.7	-24.8	19.	347.0	23.5
500.0	19123.	-10.1	-29.3	19.	356.3	25.8
450.0	21757.	-16.0	-34.2	19.	5.6	30.1
400.0	24627.	-23.4	-40.5	19.	14.6	20.6
350.0	27786.	-30.7	-46.8	19.	336.0	22.5
300.0	31310.	-39.6			311.6	37.0
250.0	35329.	-47.9			293.1	60.3
200.0	40056.	-58.6			294.0	70.2
175.0	42763.	-65.8			292.8	68.0
150.0	45783.	-71.7			285.7	56.6
125.0	49373.	-69.3			288.5	60.2
100.0	53697.	-73.7			295.9	56.4
80.0	57988.	-74.3			312.6	39.5
70.0	60548.	-76.1			305.0	37.3
60.0	63496.	-72.2			316.6	38.7
50.0	67059.	-67.4				

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.